

### Air Quality Permitting Statement of Basis

June 22, 2006

# Tier II Operating Permit and Permit to Construct No. P-060121 Interstate Concrete and Asphalt Company, Sandpoint Facility ID No. 017-00048

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**FINAL PERMIT** 

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#### Acronyms, Units, and Chemical Nomenclature

AFS AIRS Facility Subsystem

AIRS Aerometric Information Retrieval System

AQCR Air Quality Control Region
CFR Code of Federal Regulations

CO carbon monoxide

DEQ Department of Environmental Quality
EPA Environmental Protection Agency

HAPs Hazardous Air Pollutants

HMA hot mix asphalt

IDAPA A numbering designation for all administrative rules in Idaho promulgated in accordance

with the Idaho Administrative Procedures Act

lb/hr pound per hour

NESHAP Nation Emission Standards for Hazardous Air Pollutants

NO<sub>2</sub> nitrogen dioxide NO<sub>X</sub> nitrogen oxides

NSPS New Source Performance Standards

PM particulate matter

PM<sub>10</sub> particulate matter with an aerodynamic diameter less than or equal to a nominal 10

micrometers

PSD Prevention of Significant Deterioration

PTC permit to construct

Rules Rules for the Control of Air Pollution in Idaho

SIC Standard Industrial Classification

SIP State Implementation Plan

SM synthetic minor
SO<sub>2</sub> sulfur dioxide
T/hr tons per hour
T/yr tons per year

UTM Universal Transverse Mercator
VOC volatile organic compound

#### 1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01 Section 201, Rules for the Control of Air Pollution in Idaho (Rules) for Permits to Construct.

#### 2. FACILITY DESCRIPTION

Interstate Concrete and Asphalt Company (Interstate) operates a hot mix asphalt (HMA) plant, a concrete batch plant, and associated aggregate handling at this facility located at 1000 Baldy Mountain Road in Sandpoint.

#### 3. FACILITY / AREA CLASSIFICATION

This Interstate facility in Sandpoint is defined as a synthetic minor facility because, without permit limits on the potential to emit, the PM<sub>10</sub>, CO, and NO<sub>X</sub> emissions would exceed 100 tons per year each. The Aerometric Information Retrieval System (AIRS) classification is "SM" because the potential to emit of CO and NO<sub>X</sub> are limited to less than major source levels by limiting the production of asphalt and concrete from the HMA and concrete batch plants. The potential to emit of PM<sub>10</sub> is limited to less than major source levels by the use of baghouses.

The facility is located within AQCR 63 and UTM zone 11. The facility is located in Bonner County and in the Sandpoint PM<sub>10</sub> Nonattainment Area. The Tier II Operating permit issued to this facility is identified as a control measure in the PM<sub>10</sub> Air Quality Improvement Plan for Sandpoint, dated August 1996. Bonner County is designated attainment for ozone and unclassifiable for all other criteria pollutants (CO, NO<sub>X</sub>, SO<sub>2</sub>, and lead). The Sandpoint area is designated attainment for PM<sub>2.5</sub>. Outside of the Sandpoint PM<sub>10</sub> nonattainment boundary, Bonner County is unclassifiable for PM10.

The AIRS information provided in Appendix A defines the classification for each regulated air pollutant at Interstate Concrete and Asphalt Company. This required information is entered into the EPA AIRs database.

#### 4. APPLICATION SCOPE

No application was received; revisions to the permit were identified by DEQ. This revision to the Tier II operating permit and permit to construct affects only the HMA plant, and is limited to the following changes:

- 1) Include an additional permit condition requested by the Coeur d'Alene Regional Office to clarify that Air Pollution Emergency Rules contained in IDAPA 58.01.01.550-562 apply to this facility.
- 2) Correct typographical errors in the emission inventory and emission limits for fugitive emissions.

#### 4.1 Application Chronology

June 20, 2006

Receipt of additional comments from the Coeur d'Alene Regional Office requesting that an additional permit condition be added, and noting typographical errors in the fugitive emission limits.

#### 5. PERMIT ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this PTC.

#### 5.1 Equipment Listing

No changes to equipment have been proposed.

#### 5.2 Emissions Inventory

Table 5.1 shows the corrected table summarizing the change in estimated emissions of particulate matter (PM) and criteria pollutants resulting from changes addressed in PTC P-060113, issued June 14, 2006. Corrected values (which were inadvertently copied from another worksheet for the P-060113 statement of basis) and clarifying total values are shown in italics. This corrected table provides the basis for the revisions to the fugitive emission limits.

Table 5.1 PTC CHANGES TO ESTIMATED EMISSIONS FROM HMA PLANT – PM & CRITERIA POLLUTANTS

Table 5.1 PTC	CHAN	GES I	O F211	MAILU	FWID	NOU2 I	KOM	HMA I	LANI	-rm	CKI	TERLA	POLLUTA	NTS
Pollutant	PM		PM <sub>10</sub>		NO <sub>x</sub>		SO <sub>2</sub>		СО		VOC		Pb	
Process(es):	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	Т/уг
HMA Plant:														
Drum Mix Dryer <sup>c</sup>	8.97	2.09	6.28	1.46	16.5	3.85	17.4	4.06	39.0	9.10	9.60	2.24	4.5E-03	1.1E-03
Batch Mix Dryer b	5.8ª	2.0*	2.3 *	0.81 *	24	8.4	17.6	6.16	80	28	7.2	2.52	2.0E-3	7.0E-4
Increase/Decrease	3,17	0.09	3.98	0.65	-7.5	-4.55	-0.2	-2.1	-41	-18.9	2.4	-0.28	0.0025	0.0004
Vehicle Fugitive Du	Vehicle Fugitive Dust (Paved and Unpaved):													
300 T/hr HMA c			0.072	0.0168			-	<u> </u>		<u> </u>	-	ļ		
200 T/hr HMA c			0.048	0.0112			<b>†</b>	_						ļ
Increase/Decrease			0.024	0.0056	<u> </u>				†					
Process Fugitive Du	st:		·			•				· · ·		<del></del>	· · · · · · · · · · · · · · · · · · ·	
300 T/hr HMA c							<u> </u>		ĺ –					
Front Loader		!	0.086	0.0199		•					l			
HMA Loadout		L	0.036	0.0252	ļ	1						ĺ		
Total (300 T/hr)			0.112	0.045										
200 T/hr HMA c														
Front Loader			0.057	0.0132			ļ			i		Į I		
HMA Loadout			0.024	0.0168								ľ		
Total (200 T/hr)			0.081	0.0300										-
Front Loader			0.029	0.0067										
HMA Loadout			0.012	0.0084							i			
Increase/Decrease			0.041	0.0151				i						
TOTAL CHANGE	3.17	0.09	4.05	0.67	-7.5	-4.55	-0.2	-2.1	-41	-18.9	2.4	-0.28	0.0025	0.0004

Emission rates based on permit limits contained in Permit No. T2-040102, dated June 25, 2005.

#### 5.3 Modeling

No modeling was required for these revisions to the permit.

<sup>&</sup>lt;sup>b</sup>Emission estimates for HMA batch plant taken from Technical Analysis for Permit No. T2-040102, except as noted.

Emission estimates taken from March 23, 2006 application, which presumed 462 hours of front loader operations and 1400 hours of HMA loadout.

#### 5.4 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules with respect to this PTC.

IDAPA 58.01.01.201 ...... Permit to Construct Required

No new construction or facility modifications are associated with this permit action, so a PTC is not required. This new permit is being issued only to incorporate administrative revisions and typographical corrections in an existing permit.

#### 5.5 Fee Review

In accordance with IDAPA 58.01.01.224.02 and 225, no PTC application fee or PTC processing fee is required.

#### 5.6 Regional Review of Draft Permit

A draft permit was not issued. The changes requested by the Coeur d'Alene Regional Office have been incorporated into this final permit.

#### 5.7 Facility Review of Draft Permit

A draft permit was not issued.

#### 6. PERMIT CONDITIONS

This section describes only those conditions that have been revised, modified, or deleted as a result of this permit action. All other permit conditions remain unchanged.

#### **Permit Condition 2.17**

This condition was added at the Regional Office's request to clarify that the facility must comply with applicable operating restrictions imposed by regulations during air pollution emergency stages.

D 0/0113

#### Permit Condition 3.1.4 and Appendix A

The following typographical errors in the fugitive dust emission limits were corrected:

		<u>P-000113</u>	P-060121 (corrected)
Vehicle fugitive dust (Paved and Unpaved):	$PM_{10}$	0.72 lb/hr	0.072 lb/hr
Process fugitive dust	$PM_{10}$	0.06 T/yr	0.045 T/yr

#### 7. PUBLIC COMMENT

No new construction or facility modifications are associated with this permit action. A PTC is not required, and therefore, an opportunity for public comment period is not required.

#### 8. RECOMMENDATION

Based on the review of the application materials, and all applicable state and federal regulations, staff recommends that DEQ issue final PTC/Tier II Operating Permit No. P-060121 to Interstate Concrete and Asphalt Company.

CR/bf Permit No. P-060121

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## APPENDIX A AIRS Information P-060121

#### AIRS/AFS\* FACILITY-WIDE CLASSIFICATIOND DATA ENTRY FORM

Facility Name:	Interstate Concrete and Asphalt Company
Facility Location:	Sandpoint
AIRS Number:	017-00048

AIR PROGRAM POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	SM <b>80</b>	TITLE V	AREA CLASSIFICATION  A-Attainment  U-Unclassified  N- Nonattainment
SO <sub>2</sub>	В							Ũ
NO <sub>x</sub>	SM							ប
CO	SM							U
PM <sub>10</sub>	SM							N
PT (Particulate)	SM		SM					U
VOC	В							Α
THAP (Total HAPs)	В							
			APPL	ICABLE SUI	BPART			
			I					

Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

- A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For HAPs only, class "A" is applied to each pollutant which is at or above the 10 T/yr threshold, or each pollutant that is below the 10 T/yr threshold, but contributes to a plant total in excess of 25 T/yr of all HAPs
- SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
- B = Actual and potential emissions below all applicable major source thresholds.
- C = Class is unknown.
- ND = Major source thresholds are not defined (e.g., radionuclides).

AIRS/AFS Classification Codes: